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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,902	01/18/2002	Wolfgang A. Renner	1700.0190004/BJD/SJE	7792
26111	7590	04/29/2005	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			MOSHER, MARY	
			ART UNIT	PAPER NUMBER
			1648	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/050,902	RENNER ET AL.	
	Examiner	Art Unit	
	Mary E. Mosher, Ph.D.	1648	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 220-361 is/are pending in the application.
- 4a) Of the above claim(s) 230-237, 245-247, 250-257, 259-267, 277-331 and 334-354 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 220-229, 238-244, 248, 249, 258, 329, 332, 333 and 355-361 is/are rejected.
- 7) ☒ Claim(s) 268-276 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/18/05 has been entered.

### ***Election/Restrictions***

This application was subject to a restriction/election requirement on 4/1/2003. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/26/2003. Applicant elected Q $\beta$  core, N-S linker, and VEGFRII antigen. This was found free of the art, and examination was extended to generic claims, which were held non-allowable. Now all of the claims have been replaced. Only claims 268-276 are directed to the species previously held allowable. For the other claims, search has been extended beyond the elected species only to the extent of determining the patentability of the generic invention. Where the same art clearly reads upon dependent claims, they are included in the statement of rejection. However, once the generic claims were determined to be unpatentable, search was not extended to all of the species recited in all of the dependent claims. In particular, the examiner has not performed double patenting analysis on the claims withdrawn from examination. Therefore applicant is put on notice that, if a generic claim becomes allowable over the prior art, there may be a

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number of double patenting rejections directed to the claims currently withdrawn from examination.

Claims 230-237, 244-247, 250-257, 259-328, 300-331, 334-354 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claims 220-229, 238-244, 248-249, 258, 329, 332, 333, 355-361 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastico et al 5698424 (previously cited) in view of Stanworth WO 90/15878. Mastico teaches presentation of antigens on an RNA bacteriophage MS2 virus-like particle. Mastico also suggests similar use of other RNA phages including Q $\beta$ , fr, and GA, see column 2 line 45. At column 3, lines 44-52, Mastico also teaches as a presented antigen "the IgE decapeptide described...and claimed in International Patent Application Publication No. WO90/15878." Upon referring to Stanworth WO90/15878, it is apparent that the "IgE decapeptide" discussed in Mastico is an antigenic determinant of a human IgE, see for example Stanworth page 3 and claim 7. Since "a human IgE" is listed in applicant's claims as a self-antigen, the product explicitly suggested by Mastico therefore meets the claim limitations. Stanworth teaches that the IgE decapeptide is immunogenic when coupled to a carrier, see page 6 lines 1-5; teaches activate immunization and amino acid linkers, see page 9; and immunization using an adjuvant, see pages 17 and 21. Mastico also suggests at least one of the linkers recited in applicant's claim 249, see column 2 lines 33-36. It would have been within the ordinary skill of the art to make the product explicitly suggested by Mastico, using the peptide of Stanworth as explicitly

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suggested by Mastico, with reasonable expectation of success. It would further have been within the ordinary skill of the art to use the product suggested by Mastico for immunization as suggested by Stanworth, with reasonable expectation of success.

Therefore the invention as a whole is prima facie obvious, absent unexpected results.

Note that success in obtaining an antibody response against the IgE self-antigen would not constitute an unexpected result, because Stanworth teaches a successful antibody response.

### ***Allowable Subject Matter***

Claims 268-276 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

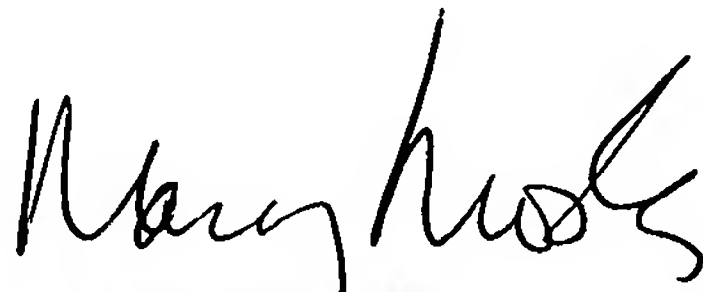
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is 571-272-0906. The examiner can normally be reached on M-T and alternate F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/28/05

  
MARY E. MOSHER, PH.D.  
PRIMARY EXAMINER

  
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